U. S. DEPARTMENT OF COMMERCE
DANIEL C. ROPER, Secretary
NATIONAL BUREAU OF STANDARDS
LYMAN J. BRIGGS, Director

MATTRESSES FOR INSTITUTIONS

COMMERCIAL STANDARD CS55–35

Effective Date for New Production September 6, 1935

BUREAU OF STANDARDS
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A RECORDED STANDARD OF THE INDUSTRY

Approved by the American Standards Association
as American Tentative Standard CS55–35

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U. S. Department of Commerce National Bureau of Standards

PROMULGATION

of

COMMERCIAL STANDARD CS55–35

for

MATTRESSES FOR INSTITUTIONS

On October 5, 1933, at the instance of the American Hospital Association, a general conference of representative manufacturers, distributors, and users of mattresses for institutions appointed a special committee to adopt a recommended commercial standard for this commodity. The industry later accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard became effective for new production on September 6, 1935.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Daniel C. Roper,
Secretary of Commerce.

MATTRESSES FOR INSTITUTIONS

COMMERCIAL STANDARD CS55–35

CLASSIFICATION

Curled-hair mattresses. (See section I, page 1.)
Type IV. Hair-filled (grades D, E, and F). (See page 2.)
Cotton-felt mattresses. (See section II, page 7.)
Type V. All-cotton felt (grades G and H). (See page 8.)

SECTION I.—CURLED-HAIR MATTRESSES

SCOPE

1. Section I covers minimum requirements for mattresses filled with hair, for institutional use.

TYPE, GRADES, AND SIZES

2. Mattresses covered by section I are designated as follows:
(a) Type IV.[1] Hair-filled in one class only.
(b) Grades of filling.[2]
Curled hair in three grades:
Grade D,[3] 37.5 percent of horse mane hair, 37.5 percent of horse tail hair, and 25 percent of hog hair.
Grade E, 75 percent of cattle tail hair and 25 percent of hog hair.
Grade F, 75 percent of horse mane hair and 25 percent of hog hair.
(c) Sizes, over-all nominal:

39 by 76 in. (for 39 by 78 in. bed).
39 by 74 in. (for 39 by 76 in. bed).
36 by 76 in. (for 36 by 78 in. bed).
36 by 74 in. (for 36 by 76 in. bed).
30 by 76 in. (for 30 by 78 in. bed).
30 by 74 in. (for 30 by 76 in. bed).
30 by 60 in. (for 30 by 62 in. bed).

GENERAL REQUIREMENTS[4]

3. *Workmanship.*—Workmanship shall be first class in every respect. Both sides of the mattress shall be so finished that either side may be used with equal comfort. Mattress shall be well finished, clean, and free from defects that materially affect its appearance or that might affect its serviceability. It shall be delivered ready for use.

[1] For types I, II, and III and grades A, B, and C, see Hospital Mattresses, Commercial Standard CS54-35, issued by the U. S. Department of Commerce.
[2] Throughout this standard, percentages indicated are based on weight.
[3] See footnote 1.
[4] When laboratory testing is required to demonstrate conformity with any requirement, if the method of test is not specified or described, it is assumed that modern, approved test methods will be used. In the settlement of controversy, test methods used and approved by the National Bureau of Standards shall apply.

4. *Materials.*—All materials shall be 100 percent new materials.

(a) *Ticking or cover.*—High-grade blue and white twill or other suitable weave ticking having not less than 78 warp threads and 62 filling threads per inch and weighing not less than 9 oz/yd^2 shall be used. Breaking strength (grab method) shall be not less than 135-lb warp; 90-lb filling. (In lieu of the foregoing, ticking having an equalized breaking strength not less than 115 lb in both the warp and the filling may be substituted.)

The ticking on each face or cover shall be made up of not more than two pieces with a longitudinal seam properly matched and securely sewn. The stripes of the ticking on the upper and lower faces shall run lengthwise.

(b) *Tufting.*—Each mattress shall be well and securely tufted or tied with high-grade polished cotton twine having a breaking strength (single strand) of not less than 36 lb. In lieu of this, ties may be of tubular tape of not less than ⅛ in. diameter or single flat tape ⅝ in. in width, either of which shall have a breaking strength of not less than 50 lb. A round needle which will not cut the ticking shall be used for all tufting. Tie or tuft holes shall be spaced not less than ½ in. apart.

Tufts may be of tape, composition buttons, molded rubber, covered corrosion-resisting metal, or other suitable material. Raw-cotton tufts are not acceptable. For pattern of tufting and minimum number of tufts see detail requirements.

(c) *Thread and stitching.*—Thread shall be not less than 3-cord and shall have a breaking strength (single strand) of not less than 3 lb. All machine stitching shall run not less than 10 stitches to the inch.

(d) *Edge.*—Unless plain edge is specified, all edges shall be of the roll type, well filled, with rows of stitches not over 2 in. apart, and with two additional rows of side stitching, making what is known as a four-row Imperial Edge.

(e) *Corners.*—Unless otherwise specified, corners shall be round and cut on a 4- to 5-in. radius.

(*f*) *Lifting straps.*—Two lifting straps of double-thickness ticking, with turned-in sewed edges, not less than ½ in. wide shall be securely attached in a vertical position to each side of the mattress border at the top and bottom seams, located about 36 in. apart and equidistant from the ends. Straps will not be required on mattresses 60 in. or less in length. When longitudinal lifting straps are specified in lieu of vertical, they shall be furnished only on pre-built borders, or when other adequate reinforcement is provided.

(g) *Tags.*—Tags marked to conform to the legal requirements of the State in which the mattress was manufactured and/or is to be sold shall be sewn on each mattress.

DETAIL REQUIREMENTS

TYPE IV. HAIR FILLED

5. *Cleanliness.*—All hair used for filling or upholstering shall meet the following test to determine cleanliness, sterilization, and freedom from offensive odors. This requirement shall be fulfilled to the entire satisfaction of the hospital or institution authorities.

Four ounces of hair are immersed in 2 liters (roughly 2 quarts) of water. (The hands of the operator are thoroughly cleansed with a sterilizing wash before each individual lot of hair is so treated.) After standing in this water bath for 2 hours and becoming thoroughly soaked, the mass is agitated the same as for ordinary cloth washing, until all the clinging dirt and impurities are separated from the hair. Next the hair is rinsed free from water by squeezing with the hands. The remaining hair is screened off from the water, using 14-mesh screen. Note whether the resulting solution is cloudy, dirty, or clear. The solution should be clear to meet the requirements of the specification for cleanliness.

Allow the solution to stand not less than 72 hours, at room temperature, in open containers. (*Caution.*—If containers are sealed there is danger of bursting of the container due to generated gases.) Examine for evidence of offensive odors or decomposition.

6. *Moisture.*—The weights of hair shown in table 1 are based on a normal moisture content of 10 percent. If the hair used in mattress construction contains more than this amount of moisture it shall be dried before weighing and filling, or a sufficient excess of hair shall be used to compensate for the weight of the excess moisture.

7. *Horsehair.*—Shall be new 100 percent horsehair, properly cleaned and curled. It shall be odorless and free of epidermis and all foreign matter, including hair from other animals and from parts of the horse other than mane and tail.

(a) *Horse-mane hair.*—Not more than 17 percent shall be under 2 in. in length, not more than 67 percent shall be under 5 in. in length. (Not less than 33 percent shall be 5 in. or over in length.)

(b) *Horse-tail hair.*—Not more than 10 percent shall be under 2 in. in length, not more than 30 percent shall be under 6 in. in length, not more than 90 percent shall be under 10 in. in length. (Not less than 10 percent shall be 10 in. or over in length.)

8. *Cattle-tail hair.*—Shall be new 100 percent cattle-tail hair of natural glassy white color or dyed black, free of dust, vegetable fiber, scaly matter, or other foreign substance, and be properly curled. It shall be free of hair from other animals and from parts of cattle other than the tail. If dyed, paraphenylenediamine, aminophenol, or other dyes classified by the British color index as no. 875 shall not be used. Dye shall not discolor the hands in ordinary handling of the hair. Not more than 10 percent shall be under 2 in. in length, not more than 50 percent shall be under 5 in. in length, not more than 90 percent shall be under 9 in. in length. (Not less than 10 percent shall be 9 in. or over in length.)

9. *Hog hair.*—Shall be new 100 percent hog hair, properly cleaned and curled. It shall be dyed black with a fast-color dye conforming to requirements of paragraph 8. It shall be odorless and free of epidermis and all foreign matter. Not more than 40 percent shall be under 1¾ in. in length.

10. *Fastness of color.*—The color of all hair used shall be fast when tested according to the following methods:

(a) *Fastness to crocking.*—The hair to be tested is rubbed on a white unsized piece of cotton-worsted union cloth. A sample of hair sufficient to cover the end of the finger is placed over the index finger and, applying considerable pressure, the finger is passed ten times over a

length of 4 in. on the white cloth. A similar test is made on cloth moistened with water. There shall be no appreciable staining of either the wet or dry cloth.

(b) *Fastness to perspiration.*—Two solutions are required as follows:

1. Acid Solution

10 g of sodium chloride.
1 g of lactic acid, U.S.P. 85 percent.
1 g of disodium orthophosphate, anhydrous.
Make up to 1 liter with water.

2. Alkaline Solution

10 g of sodium chloride.
4 g of ammonium carbonate, U.S.P.
1 g of disodium orthophosphate, anhydrous.
Make up to 1 liter with water.

Two specimens of the colored hair and two pieces of undyed cotton-worsted union cloth measuring 2 by 4 in. are required.

A specimen of hair and a piece of the undyed cloth are thoroughly wet with the acid solution, rolled with the cloth on the outside, and inserted in a glass tube, one end of which is closed, leaving one-third of the roll projecting. The tube is about 15 by 150 mm in size. The other specimen and cloth are treated similarly using the alkaline test solution. Each tube is then placed in a glass desiccator about 4 in. in diameter, in the bottom of which is placed about 300 ml of a 70 percent aqueous solution of sulphuric acid. The specimens should dry in about 48 hours. They are then ready for examination. No appreciable stain shall be visible on either white cloth.

(The above methods of test are based on the standard methods of the American Association of Textile Chemists and Colorists).

11. Curled hair shall conform to one of the following grades, as required in the invitation for bids:

Grade D. 37.5 percent of horse mane hair, 37.5 percent of horse tail hair, and 25 percent of hog hair.
Grade E. 75 percent of cattle tail hair and 25 percent of hog hair.
Grade F. 75 percent of horse mane hair and 25 percent of hog hair.

12. *Filling.*—The mattress shall be completely filled with the grade of hair specified, which shall be evenly distributed. This is known as the primary filling. Additional hair of the same grade shall be well and evenly distributed over the middle one-third area of the top and bottom extending over the full width of the mattress. This is known as the crown filling. The total amount of hair used per mattress shall be not less than given in table 1. Hair for crowning shall be approximately 15 percent of the total weight of hair used.

13. *Weight.*—The total weight for each mattress shall be not less than the minimum given in table 1.

14. *Sizes.*—Unless otherwise specified, the over-all sizes of the mattresses shall be as given in table 1, with a plus or minus tolerance of ½ in., except that minus tolerances will not be allowed on both dimensions for the same mattress.

15. *Tufts or ties.*—The minimum number of tufts or ties is given in table 1. Tufts shall be arranged in a diamond pattern.

TABLE 1.—*Curled-hair mattresses*

(Type IV)

Over-all sizes of mattress	Minimum net weight of hair, all grades	Minimum number of ties	Minimum total weight of mattress
	Pounds		*Pounds*
39 by 76 by 5 inches	33	35	38
39 by 74 by 5 inches	32	30	37
36 by 76 by 5 inches	31	28	35
36 by 74 by 5 inches	30	24	34
30 by 76 by 5 inches	26	20	29
30 by 74 by 5 inches	25	20	28
30 by 60 by 5 inches	20	15	23

16. *Packing.*—This specification contemplates that mattresses normally will be shipped by closed truck, unmixed with other freight, and protected from injury, direct from bidder's plant or warehouse, to the purchaser. For such methods of shipment, cartons will not be required except when specified in invitation for bids. Mattresses shipped by l. c. l. freight, express, or by truck in mixed cargo shall be packed in fiberboard or cardboard cartons.

17. *Certification and labeling.*—For a suggested form of certification of conformance to this commercial standard see page 9.

SECTION II.—COTTON-FELT MATTRESSES

SCOPE

18. Section II covers minimum requirements for mattresses filled with all-cotton felt, for institutional use.

TYPE, GRADES, AND SIZES

19. Mattresses covered by section II are designated as follows:

(a) Type V. All-cotton felt in one class only.

(b) Cotton felt filled in two grades:

Grade G. No. 2 cotton linters, 9 oz ticking.
Grade H. No. 3 cotton linters, 7 oz ticking.

(c) Sizes, over-all nominal:

39 by 77 in. (for 39 by 78 in. bed).
39 by 75 in. (for 39 by 76 in. bed).
36 by 77 in. (for 36 by 78 in. bed).
36 by 75 in. (for 36 by 76 in. bed).
30 by 77 in. (for 30 by 78 in. bed).
30 by 75 in. (for 30 by 76 in. bed).
30 by 61 in. (for 30 by 62 in. bed).

GENERAL REQUIREMENTS[5]

20. *Workmanship.*—Workmanship shall be first class in every respect. Both sides of the mattress shall be so finished that either side may be used with equal comfort. Mattress shall be well finished, clean, and free from defects that materially affect its appearance or that might affect its serviceability. It shall be delivered ready for use.

21. *Materials.*—All materials shall be 100 percent new materials.

(a) *Tufting.*—Each mattress shall be well and securely tufted or tied with high-grade polished cotton twine having a breaking strength (single strand) of not less than 36 lb. In lieu of this, ties may be of tubular tape of not less than ⅛ in. diameter or single flat tape ⅝ in. in width, either of which shall have a breaking strength of not less than 50 lb. A round needle which will not cut the ticking shall be used for all tufting. Tie or tuft holes shall be spaced not less than ½ in. apart.

Tufts may be of tape, composition buttons, molded rubber, or other suitable material. For pattern of tufting and minimum number of tufts see detail requirements.

(b) *Thread and stitching.*—Thread shall be not less than 3-cord and shall have a breaking strength (single strand) of not less than 3 lb. All machine stitching shall run not less than 10 stitches to the inch.

(c) *Edge.*—Unless plain edge is specified, all edges shall be of the roll type, well filled, with rows of stitching not over 2 in. apart, and

[5] When laboratory testing is required to demonstrate conformity with any requirement, if the method of test is not specified or described, it is assumed that modern, approved test methods will be used. In the settlement of controvery, test methods used and approved by the National Bureau of Standards shall apply.

with two additional rows of side stitching, making what is known as a four-row Imperial Edge.

(d) *Corners.*—Unless otherwise specified, corners shall be round and cut on a 4- to 5-inch radius.

(e) *Tags.*—Tags marked to conform to the legal requirements of the State in which the mattress was manufactured and/or is to be sold shall be sewn on each mattress.

DETAIL REQUIREMENTS

TYPE V. ALL-COTTON FELT

22. *Filling.*

(a) Grade G. The mattress shall be completely filled with cotton felt equal to felt made from a full range in equal parts of the U. S. Grade No. 2 cotton linters. (See U. S. Department of Agriculture S. R. A. No. 125.)

(b) Grade H. The mattress shall be completely filled with cotton felt equal to felt made from a full range in equal parts of the U. S. Grade No. 3 cotton linters. (See U. S. Department of Agriculture S. R. A. No. 125.)

(c) The filling shall be felted by a garnett machine and evenly distributed. This is known as the primary filling. Additional felt of the same kind and grade, about 15 percent of the total amount, shall be well and evenly distributed over the middle one-third of both top and bottom extended over the full width of the mattress. This is known as the crown filling. The amount of felt per mattress shall be not less than that given in table 2.

23. *Ticking or cover.*

(a) Grade G. High-grade blue and white twill or other suitable weave ticking having not less than 78 warp threads and 62 filling threads per inch and weighing not less than 9 oz/yd ^{2} (equivalent to 8 oz per linear yd 32 in. wide) shall be used. Breaking strength (grab method) shall be not less than 135 lb in the warp and 90 lb in the filling. (In lieu of the foregoing, ticking having an equalized breaking strength of not less than 115 lb in both warp and filling, may be substituted.)

(b) Grade H. High-grade blue and white twill or other suitable weave ticking having not less than 70 warp threads and 50 filling threads per inch and weighing not less than 7 oz/yd ^{2} shall be used. Breaking strength (grab method) shall be not less than 110 lb in the warp and 65 lb in the filling.

(c) The ticking on each face or cover shall be made up of not more than two pieces with a longitudinal seam properly matched and securely sewn. The stripes of the ticking on the upper and lower faces shall run lengthwise.

24. *Weight.*—The total weight for each mattress shall be not less than the minimum given in table 2.

25. *Sizes.*—Unless otherwise specified, the over-all sizes of the mattress shall be as given in table 2, with a plus or minus tolerance of ½ in., except that minus tolerances will not be allowed on both dimensions for the same mattress.

26. *Tufts or ties.*—Cotton-felt mattresses shall have not less than the number of tufts or ties given in table 2, which shall be arranged in a diamond pattern.

TABLE 2.—*Cotton-felt mattresses*

(Type V)

Over-all size of mattress	Minimum net weight of cotton felt	Minimum number of ties	Minimum total weight of mattress
	Pounds		*Pounds*
39 by 77 by 5 inches	39	35	44
39 by 75 by 5 inches	38	30	43
36 by 77 by 5 inches	36	28	40
36 by 75 by 5 inches	35	24	39
30 by 77 by 5 inches	30	20	34
30 by 75 by 5 inches	29	20	33
30 by 61 by 5 inches	24	15	27

27. *Packing.*—This specification contemplates that mattresses normally will be shipped by closed truck, unmixed with other freight, and protected from injury, direct from bidder's plant or warehouse, to the purchaser. For such methods of shipment, cartons will not be required except when specified in invitation for bids. Mattresses shipped by l. c. l. freight, express, or by truck in mixed cargo shall be packed in fiberboard or cardboard cartons.

AMERICAN TENTATIVE STANDARD

This commercial standard was approved as American Tentative Standard CS55–35 by the American Standards Association on November 1, 1935.

CERTIFICATION

It is recommended that mattresses manufactured in accordance with the requirements of this standard shall have a label permanently sewn to the mattress worded as follows:

> The _____ Company certifies this Type _____, Grade _____ mattress to conform to all requirements of the Commercial Standard CS55–35, issued by the U. S. Department of Commerce.

EFFECTIVE DATE

The standard became effective for production on September 6, 1935.

STANDING COMMITTEE

The following comprise the membership of the standing committee, which is to review, prior to circulation for acceptance, proposed revisions to keep the standard abreast of progress. Comment and questions concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee:

HOWARD E. BISHOP, Robert Packer Hospital, Sayre, Pa.
JAMES B. FRY, Dept. of Property & Supplies, Harrisburg, Pa.

C. H. Hett, Gordon Bros., Inc., Philadelphia, Pa.
A. J. Lomas, University Hospital, Baltimore, Md.
Benjamin A. Powell, Foster Bros. Mfg. Co., Washington, D. C.
B. B. Sandidge, Central Dispensary and Emergency Hospital, Washington, D. C.
John M. Smith, Hahnemann Hospital, Philadelphia, Pa.
Howard M. Taylor, International Bedding Co., Baltimore, Md.
Matthew J. Wilson, Jr., Chas. Karr Co., Willow Grove, Pa.

HISTORY OF PROJECT

On October 5, 1933, at the request of the Simplification and Standardization Committee of the American Hospital Association, a joint conference of manufacturers, distributors, and users of mattresses for hospitals and other institutions was held at the National Bureau of Standards to adopt a recommended commercial standard for mattresses for hospitals and institutions. On account of the large amount of detail involved in specifications for mattresses, the conference found it impossible to complete the specification, and therefore appointed a special committee to continue the work of the conference. The personnel of the committee included Benjamin A. Powell as chairman; John M. Smith, as the representative of the American Hospital Association, and representatives of manufacturing firms producing mattresses and springs, together with representatives of Federal and State purchasing offices. In cooperation with the Simplification and Standardization Committee of the American Hospital Association, this special committee drafted a specification for mattresses for institutions, which was circulated to the industry for acceptance on June 17, 1935. The committee developed also a recommended commercial standard for mattresses for hospitals, which the industry accepted as Commercial Standard CS54–35.

Acceptances from hospitals, manufacturers, and distributors of mattresses, including a number of interested associations, estimated to represent adequate support of the standard, were received and the establishment of the standard was announced September 6, 1935.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date_____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS55–35 as our standard of practice in the

Production [1] Distribution [1] Use [1]

of mattresses for institutions.

We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.

(Cut on this line)

Signature_____

(Kindly typewrite or print the following lines)

Title_____

Company_____

Street address_____

City and State_____

[1] Please designate which group you represent by drawing lines through the other two. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: first, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

Individuals and organizations listed below have indicated, in writing, acceptance of this specification as their standard of practice in production, distribution, or use, but such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that the producers so listed guarantee all of their products to conform to the requirements of this standard.

ASSOCIATIONS

American Hospital Association, Simplification and Standardization Committee, Philadelphia, Pa.
American Hotel Association, Committee on Standardization, New York, N. Y. (In principle.)
American Sanatorium Association, Committee on Sanatorium Standards, New York, N. Y.
Cleveland Hospital Council, The, Cleveland, Ohio.
International Grenfell Association, New York, N. Y.
Master Bedding Makers of America, Holland, Mich.
National Association of Bedding Manufacturers, Chicago, Ill. (In principle.)
National Association of Curled Hair Manufacturers, Philadelphia, Pa.
National Association of Furniture Manufacturers, Inc., Chicago, Ill. (In principle.)
National Retail Furniture Association, Chicago, Ill. (In principle.)
Northern Pacific Beneficial Association, St. Paul, Minn.
Pittston Hospital Association, Pittston, Pa.
Youngstown Hospital Association, The, Youngstown, Ohio.

FIRMS

Abington Memorial Hospital, Abington, Pa.
Abraham & Straus, Inc., Brooklyn, N. Y.
Advance Bedding Co., The, La Crosse, Wis.
Akron, The City Hospital of, Akron, Ohio.
Akron Mattress Manufacturing Co., The, Akron, Ohio.
Alameda County, Calif., Oakland, Calif.
Alleganey Hospital, Cumberland, Md.
Allegheny General Hospital, Pittsburgh, Pa.
Allentown General Hospital, Allentown, Pa.
Arkansas School for Blind, Little Rock, Ark.
Armour & Company, Curled Hair Division, Chicago, Ill. (In principle.)
Associated Clinics and Hospitals, Inc., Minneapolis, Minn.
Athens State Hospital, Athens, Ohio.
Auburn City Hospital, Auburn, N. Y.
B. & B. Mattress Co., Corry, Pa.
Bailey Schmitz Co., Inc., Los Angeles, Calif.
Balyeat Manufacturing Co., The, Mansfield, Ohio.
Bannock, Hotel, Pocatello, Idaho. (In principle.)
Baptist State Hospital, Little Rock, Ark.
Barcalo Manufacturing Co., Buffalo, N. Y.
Barker Bros., Inc., Los Angeles, Calif.
Battle Creek Sanitarium, Battle Creek, Mich.
Beekman Street Hospital, New York, N. Y.
Berman, M., Mattress Co., Muskegon, Mich.
Bethesda Hospital, The, Cincinnati, Ohio.
Blocksom & Co., Michigan City, Ind.
Blodgett Memorial Hospital, Grand Rapids, Mich.
Bohnert Co., Inc., The Joseph F., Cincinnati, Ohio.
Bonnie Burn Sanatorium, Scotch Plains, N. J.
Bowne, Samuel W., Memorial Hospital, Poughkeepsie, N. Y.

Bradley & Co., W. W., Delavan, Wis. (In principle.)
Buhl Hospital, The Christian H., Sharon, Pa.
Burlington County Hospital for Insane, New Lisbon, N. J.
Cameron Bedding and Manufacturing Co., Cameron, S. C.
Carson Pirie Scott & Co., Chicago, Ill.
Central State Hospital, Indianapolis, Ind.
Chicago Curled Hair Co., Chicago, Ill.
Children's Mercy Hospital, The, Kansas City, Mo.
Church Home & Infirmary, The, Baltimore, Md.
Cochise County Hospital, Douglas, Ariz.
Colorado Mattress Manufacturing Co., Denver, Colo.
Columbia Feather Co., Chicago, Ill.
Cook Hospital Company, Fairmont, W. Va.
Cooper Manufacturing Co., Waco, Tex.
Crownsville State Hospital, Crownsville, Md.
Danvers State Hospital, Hathorne, Mass. (In principle.)
Davenport Bedding Co., Davenport, Iowa.
Dee, Thomas D., Memorial Hospital, Ogden, Utah.
Delaware Colony, State Training School for Mental Defectives, Stockley, Del.
Delaware County Hospital, Drexel Hill, Pa.
Delaware Hospital, The, Wilmington, Del.
Denison Mattress Factory, Denison, Tex.
Diamond Mattress Co., Inc., Brooklyn, N. Y.
Donaldson, L. S., Co., Minneapolis, Minn. (In principle.)
Dougherty, H. D., & Co., Philadelphia, Pa.
Eastern Oklahoma Hospital, Vinita, Okla.
Eastern State Hospital, Knoxville, Tenn.
Edgewood Sanatorium, Marshallton, Del.
Essex County Hospital, Cedar Grove, N. J.
Fifth Avenue Hospital, The, New York, N. Y.
Florida Sanitarium and Hospital, Orlando, Fla.
Foster Bros. Manufacturing Co., Utica, N. Y.
Fulton Upholstery and Mattress Co., Brooklyn, N. Y.
Gallinger Municipal Hospital, Washington, D. C.
Galveston State Psychopathic Hospital, Galveston, Tex.
Garfield Memorial Hospital, Washington, D. C.
General Hospital No. 2, Kansas City, Mo.
Georgia Street Receiving Hospital, Los Angeles, Calif.
Germantown Dispensary and Hospital, Philadelphia, Pa.
Good Samaritan Hospital, The, Lebanon, Pa.
Gordon Bros., Inc., Philadelphia, Pa.
Grafton State School, Grafton, N. Dak.
Grandview Hospital, La Crosse, Wis.
Greenwell Springs Sanatorium, Greenwell Springs, La.
Hahnemann Hospital, Philadelphia, Pa.
Halle Bros. Co., The, Cleveland, Ohio.
Hamilton, County of, Cincinnati, Ohio.
Hamilton County Tuberculosis Sanatorium, Cincinnati, Ohio.
Harbour Longmire Co., Oklahoma City, Okla.
Hard Manufacturing Co., Buffalo, N. Y.
Harrisburg Hospital, Harrisburg, Pa.
Hartford Mattress Co., Inc., Hartford, Conn.
Hartley, J. M., & Son Co., Fairmont, W. Va.
Hatch & Reutlinger, New York, N. Y. (In principle.)
Highland Park General Hospital, Highland Park, Mich.
Hopper, C. T., Furniture Co., Sioux City, Iowa.
Hospital of St. Barnabas for Women and Children, Newark, N. J. (In principle.)
Hotel Dieu—Sisters Hospital, New Orelans, La.
House of Reformation for Colored Boys, Cheltenham, Md.
Immanuel Deaconess Institute, The, Omaha, Nebr.
International Bedding Co., Baltimore, Md.
Iowa, State University of, Hospital, Iowa City, Iowa.
Jacksonville State Hospital, Jacksonville, Ill.
Jewish Hospital, St. Louis, Mo.
Kahn & Levy Furniture Co., Galveston, Tex.
Karr Co., Charles, Holland, Mich.
Keil Bedding Co., Buffalo, N. Y.
Kellers Department Store, Liberty, N. Y.
Kenedy Mattress Factory, Kenedy, Tex.
King, Inc., W. W., New York, N. Y.
Kingston Hospital, Kingston, N. Y.
Lake Julia Sanatorium, Puposky, Minn.

Landers County Hospital, Austin, Nev. (In principle.)
Lansburgh & Bro., Washington, D. C.
Li-On Bedding Co., Milwaukee, Wis.
Logan, A. J., Co., Pittsburgh, Pa.
Long Beach, Calif., Better Business Bureau of, Long Beach, Calif. (In principle.)
Lutheran Hospital of Manhattan, New York, N. Y.
Malley Co., Edward, New Haven, Conn.
Marquardt Co., Milwaukee, Wis.
McCune-Brooks Hospital, Carthage, Mo.
McKinley, Wm., Memorial Hospital, Trenton, N. J.
McPherson County Hospital, McPherson, Kans.
Mebane-Royall Co., Mebane, N. C.
Memorial Hospital, The, Pawtucket, R. I.
Men's Reformatory, Anamosa, Iowa. (In principle.)
Merced General Hospital, Merced, Calif.
Methodist Hospital of Dallas, Dallas, Tex.
Miami Valley Hospital, Dayton, Ohio.
Michigan Bedding Co., Detroit, Mich.
Middletown State Homeopathic Hospital, Middletown, N. Y.
Minneapolis Bedding Co., Minneapolis, Minn.
Minnesota, State Public School, Owatonna, Minn.
Muhlenberg Hospital, Plainfield, N. J.
Mutual Mattress & Bedding Co., New York, N. Y.
Nanticoke State Hospital, Nanticoke, Pa.
Nebraska Institution for the Feeble Minded, Beatrice, Nebr.
Nebraska Orthopedic Hospital, Lincoln, Nebr. (In principle.)
New Charleston Mills, Charleston, S. C. (In principle.)
New Jersey Orthopaedic Hospital, Orange, N. J.
New Jersey State Reformatory, Rahway, N. J.
Niagara Falls Memorial Hospital, The, Niagara Falls, N. Y. (In principle.)
Niagara Sanatorium, Lockport, N. Y.
North Dakota State Hospital for the Insane, Jamestown, N. Dak.
North Dakota State Tuberculosis Sanatorium, San Haven, N. Dak.
Norton, John M., Memorial Infirmary, Louisville, Ky.
Oakland Park Sanatorium, Thief River Falls, Minn.
Ohio Mattress Co., The, Cleveland, Ohio.
Olive View Sanatorium, Olive View, Calif.
Olwin-Angell, Aberdeen, S. Dak.
Orange Memorial Hospital, Orange, N. J.
Oregon State Tuberculosis Hospital, Salem, Oreg.
Owensboro City Hospital. Owensboro, Ky.
Packer, The Robert, Hospital, Sayre, Pa.
Paterson General Hospital, Paterson, N. J.
Pennsylvania, University of, Philadelphia, Pa.
Peoples Hospital, New York, N. Y.
Perfection Mattress and Spring Co., Birmingham, Ala.
Philipsburg State Hospital, Philipsburg, Pa.
Pick Co., Inc., Albert, Chicago, Ill.
Port Chester Bedding Co., Inc., Port Chester, N. Y.
Pottsville Hospital, The, Pottsville, Pa.
Pownal State School, Pownal, Maine. (In principle.)
Presbyterian Hospital, Chicago, Ill.
Providence Lying In Hospital, Providence, R. I.
Quality Mattress Co., Rochester, N. Y.
Quinn, Edward F., Co., Inc., New York, N. Y.
Rainier Mattress Co., Seattle, Wash. (In principle.)
Rome Co., Inc., The, Rome, N. Y.
Roosevelt Hospital, The, New York, N. Y.
Ryburn Memorial Hospital, Ottawa, Ill.
Sacramento, City Health Department, Emergency Hospital, Sacramento, Calif.
St. Agnes Hospital, Fond du Lac, Wis.
St. Barnabas Hospital, Minneapolis, Minn.
St. Elizabeth Hospital, Danville, Ill.
St. Francis Hospital of Santa Barbara, Santa Barbara, Calif.
St. Johns Hospital, Tulsa, Okla.
St. Joseph Hospital, Lancaster, Pa.
St. Joseph's Hospital, Lewiston, Idaho.
St. Joseph's Hospital, Omaha, Nebr.
St. Luke's Home & Hospital, Utica, N. Y.
St. Luke's Hospital, New Bedford, Mass.
St. Luke's Hospital and Nurses' Training School, Boise, Idaho.
St. Mary Hospital, Cincinnati, Ohio.
St. Mary's Hospital, Minneapolis, Minn.
St. Paul Bedding Co., Inc., St. Paul, Minn.
San Luis Obispo General Hospital, San Luis Obispo, Calif.
Schneider, John, & Sons, Inc., Brooklyn, N. Y.
Scranton Bedding Co., Scranton, Pa.

Scranton Better Business Bureau, Scranton, Pa. (In principle.)
Sealy Mattress Co., Houston, Tex.
Seaside and Floating Hospital, New York, N. Y.
Seton Infirmary, Austin, Tex.
Slater's, Inc., Paterson, N. J.
Springfield Mattress Co., The, Springfield, Ill.
Stanford University Hospitals, San Francisco, Calif.
Stearns & Foster Co., The, Cincinnati, Ohio.
Sumergrade, N., & Sons, Inc., New York, N. Y.
Summit County Home & Hospital, Munroe Falls, Ohio.
Sunny Acres Sanatorium, Warrensville, Ohio.
Superior Felt and Bedding Co., Chicago, Ill.
Sydenham Hospital, New York, N. Y.
Syracuse Psychopathic Hospital, Syracuse, N. Y.
Tacoma Better Business Bureau, Tacoma, Wash. (In principle.)
Texas & Pacific Railway Co., Marshall, Tex.
Union Hospital, Fall River, Mass.
United Furniture Manufacturers, Wilkes-Barre, Pa.
United States Bedding Co., Memphis, Tenn.
United States Bedding Co., The, St. Paul, Minn.
United States Testing Co., Inc., Hoboken, N. J. (In principle.)
University Hospital, Baltimore, Md.
Valley Bedding & Furniture Co., Fresno, Calif.
Van Sciver Co., J. B., Camden, N. J.
Vermont Industrial School, Vergennes, Vt.
Veterans' Home of California, Napa County, Calif.
Virginia, State Colony for Epileptics & Feeble Minded, Colony, Va.
Walsh, W. H., Chicago, Ill.
Washington County Hospital, Washington, Iowa.
Waterbury Hospital, Waterbury, Conn.
Waterbury Mattress Co., Waterbury, Conn.
Way Sagless Spring Co., Minneapolis, Minn.
Wegman, William J., Co., Inc., Rochester, N. Y.
Wells & Co., Inc., Boston, Mass.
West Union Community Hospital, West Union, Iowa.
West Virginia Training School, St. Marys, W. Va.
Western Pennsylvania Hospital, The, Pittsburgh, Pa.
Westwood Hospital, Westwood, Calif.
Wilkes-Barre General Hospital, Wilkes-Barre, Pa.
Willmar State Asylum, Willmar, Minn.
Wilmington General Hospital, Wilmington, Del.
Wilson & Co., Philadelphia, Pa.
Wilson & Jansen, San Francisco, Calif.
Wisconsin Bureau of Purchases, State of, Madison, Wis. (In principle.)
Wisconsin Industrial School for Boys, Waukesha, Wis.
Woll, F. P., & Co., Philadelphia, Pa.
Woll, Peter, & Sons Manufacturing Co., Philadelphia, Pa.
Worcester, City Hospital, Worcester, Mass.
Wyoming State Hospital, Evanston, Wyo.

U. S. GOVERNMENT

District of Columbia, Government of the, Washington, D. C. (In principle.)
War Department, Ordnance Department, Washington, D. C. (In principle.)

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CS no.	Item
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55-35.	Mattresses for institutions.
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